



# **FY2005 Accomplishments Toward Productive Lands Healthy Environment**





**Natural Resources Conservation Service**

**FY 2005 Accomplishments**



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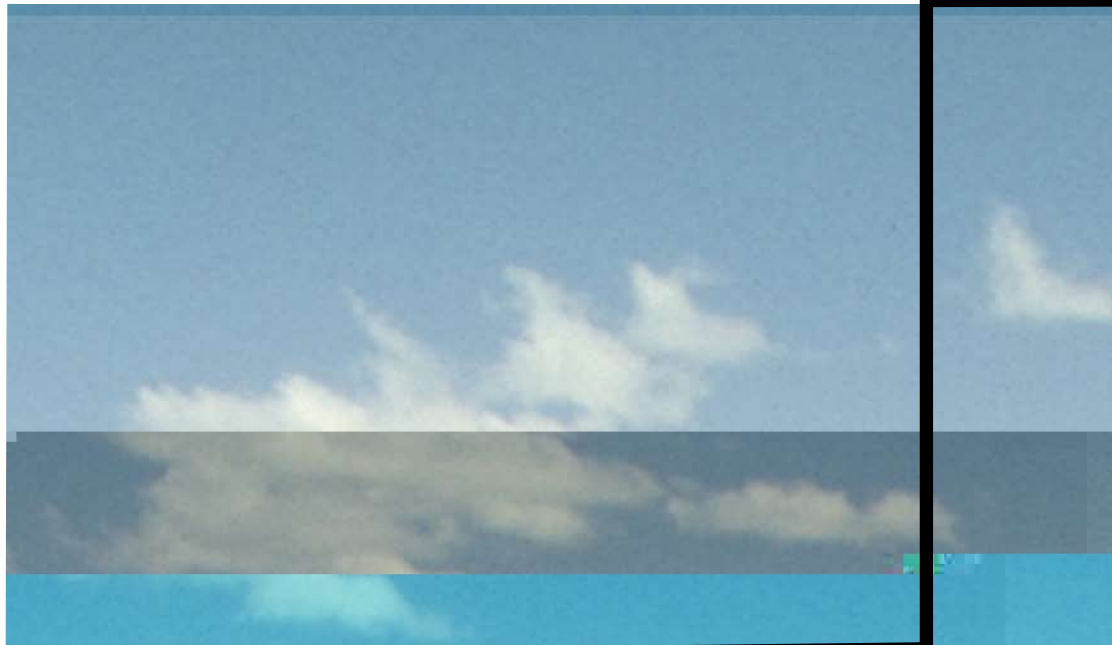




# Mission

Helping People Help the Land







## Introduction

**P**rivately owned cropland, grazing land, and forest land underpin a substantial and vibrant agricultural economy that delivers food and fiber for the Nation and the world. But these private lands also deliver much more. Through natural resource conservation, farmers, ranchers, and private forest owners also yield clean and abundant water, productive wildlife habitat, and healthy landscapes.

The Natural Resources Conservation Service (NRCS), United States Department of Agriculture (USDA) is the lead Federal Agency providing conservation assistance to the owners and managers of non-Federal lands across the Nation. Since the 1930s, NRCS has partnered with farmers, ranchers, and forest landowners to plan and apply conservation systems that assist them in meeting their economic and environmental goals. NRCS helps communities protect their local environment and develop shared natural resources to improve their standard of living and quality of life.

Modern American agriculture is diverse and dynamic, as are the sector's natural resource information, technology, and assistance needs. Providing current and effective science-based conservation technology, technical assistance, and resource information fairly and equitably is essential to achieving the NRCS vision of Productive Lands-Healthy Environment.

## Guiding Principles:

**T**hree fundamental principles guide how NRCS conducts business:

### **Service**

Our customers are entitled to the best service we can provide. We respect the dignity and worth of every person we work with, treat all individuals fairly and equitably, listen to their views, and respond with assistance tailored to their needs. Private land users will make responsible resource management decisions when equipped with appropriate data, technical assistance, and incentives. We continually strive to anticipate the public need and improve our service, and we measure our efforts against the highest professional standards. In fiscal year (FY) 2005, NRCS employees provided one-on-one technical assistance to 88,198 owners/operators of the Nation's farm and ranch lands.



## Partnership

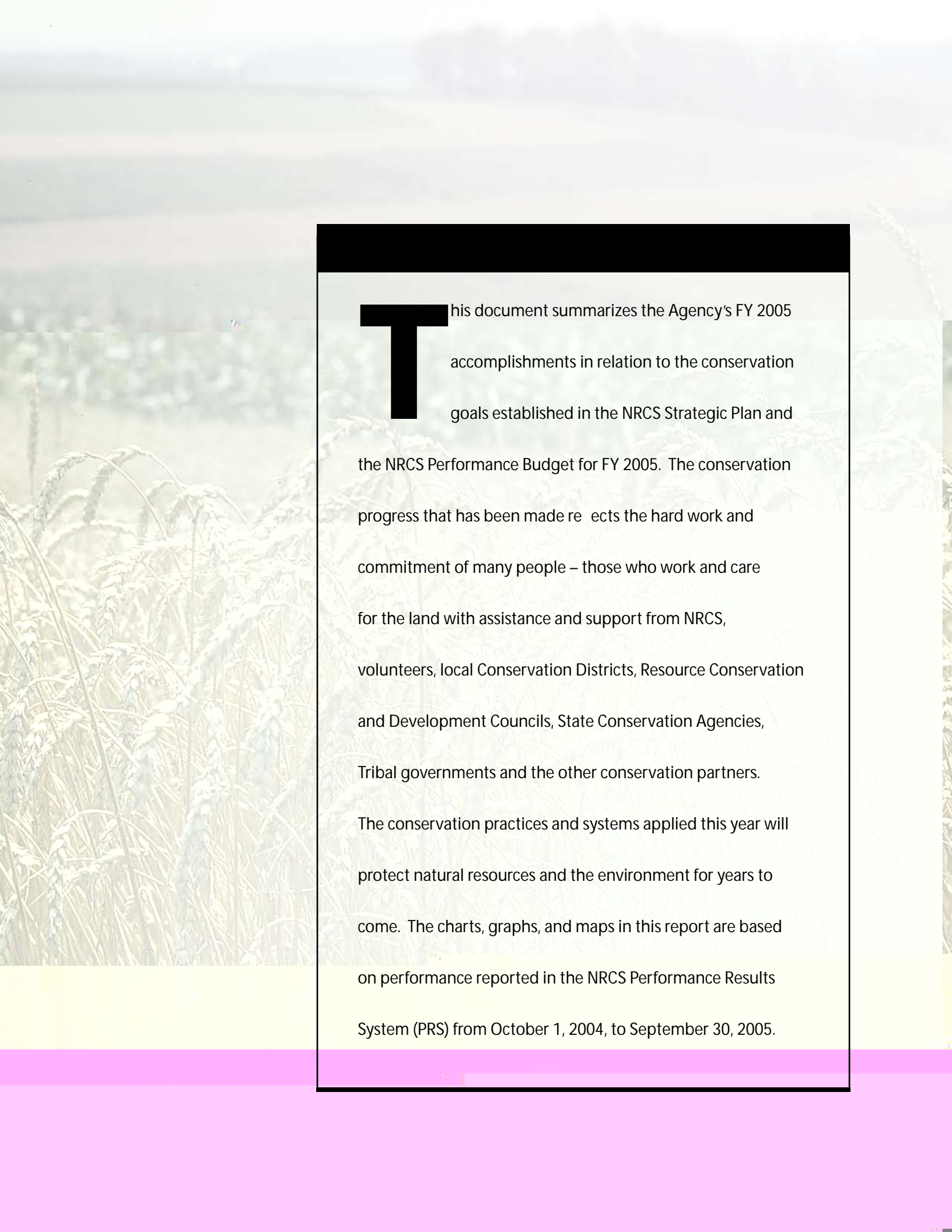
Conservation can best be achieved by the cooperative effort of agencies, organizations, and individuals across the Nation. NRCS and its Tribal, State, and local partners are dedicated to natural resource conservation. Over 8,000 employees of State and Tribal agencies and conservation districts work jointly with NRCS field staff to deliver a Federal, Tribal, State, and local cooperative conservation program. NRCS works closely with 375 local Resource Conservation and Development (RC&D) Councils, non-profit entities whose members represent units of government and civic organizations within an identified geographic area. This growing partnership also includes Land Grant Universities; other Federal agencies; flood control, irrigation, and reclamation districts; Technical Service Providers (TSPs); private sector organizations, and many others. Our non-Federal partners contributed an estimated \$862 million toward Federal conservation programs in FY 2005. The NRCS Earth Team Volunteer Program helps to significantly expand our outreach and technical assistance

efforts nationwide. Over 34,000 volunteers donated 938,600 hours in 62 percent of the NRCS offices throughout the country. The work contributed by volunteers in FY 2005 was valued at \$16.4 million.

## Technical Excellence


Effective stewardship depends on having science-based information and technology that is up-to-date, easily accessible, and designed to meet user needs. NRCS provides a broad range of technology and information from conservation "how-to" for the landowner to technical standards and tools for conservation professionals. NRCS technical standards for soil science and soil surveys, conservation engineering, and other specialties are recognized and shared worldwide. Our National Resources Inventory and snow and soil survey databases help scientists and policy makers track natural resource conditions and trends, information that is essential to conservation policy and program development. In addition, the NRCS National Publication Distribution Center (888-LANDCARE) distributed over 1 million publications in FY 2005.





**T**his document summarizes the Agency's FY 2005 accomplishments in relation to the conservation goals established in the NRCS Strategic Plan and the NRCS Performance Budget for FY 2005. The conservation progress that has been made reflects the hard work and commitment of many people – those who work and care for the land with assistance and support from NRCS, volunteers, local Conservation Districts, Resource Conservation and Development Councils, State Conservation Agencies, Tribal governments and the other conservation partners. The conservation practices and systems applied this year will protect natural resources and the environment for years to come. The charts, graphs, and maps in this report are based on performance reported in the NRCS Performance Results System (PRS) from October 1, 2004, to September 30, 2005.





# Mission Goals to Reach Our Conservation Objectives

The Nation's conservation effort on private land ensures a healthy and productive land that sustains food and fiber production, protects watersheds and ecosystems, and enhances the environment.

**In 2005, NRCS worked with farmers, ranchers, and many other partners to achieve progress toward the Agency's Mission Goals:**

## Foundation Goals

- High Quality, Productive Soils
- Clean and Abundant Water
- Healthy Plant and Animal Communities

## Venture Goals

- Clean Air
- An Adequate Energy Supply
- Working Farm and Ranch Lands





## Foundation Goals

Foundation Goals include goals for the land uses and resource

### Foundation Goal:

### High Quality, Productive **Soils**

High quality soils that sustain plant and animal productivity, maintain or enhance water and air quality, and support human health and habitation are essential for long-term sustainability and environmental stewardship.

Developing site-specific conservation plans in consultation

with the landowners, producers and managers of the Nation's farms, ranches, and non-industrial, private forests is the first step in the process of enhancing natural resource productive capacity. The most important step is the full implementation of those plans to restore, improve, and protect the quality and productive capacity of the soil resource base.



In FY 2005, with NRCS technical and financial assistance, producers, landowners, and land managers:

- Developed over 141,000 conservation plans on 13.9 million acres of cropland;
- Applied 130,000 conservation systems on nearly 11 million acres of cropland, including the application of conservation practices sufficient to reduce the acreage of cropland soils damaged by erosion by over 5.5 million acres; and

- Reduced the annual soil loss from agricultural land by 52 million tons.

To inform natural resource decision making, in FY 2005, NRCS:

- Published or released to the public 132 new or updated soil surveys, covering 81.1 million acres;
- Mapped or updated 32 million acres of soil surveys; and
- Digitized and made available to the public 366 Soil Survey

Geospatial Databases (SSURGO) covering 213 million acres. This brings the total number of digitized soil surveys to 2,379 or approximately 80 percent of the completed soil surveys.

Figure 2: Available Soil Survey Data. Updated soil survey information is available in digitized form for many areas of the Nation. All published soil surveys will be available in this form by October 2008.



## Foundation Goal:

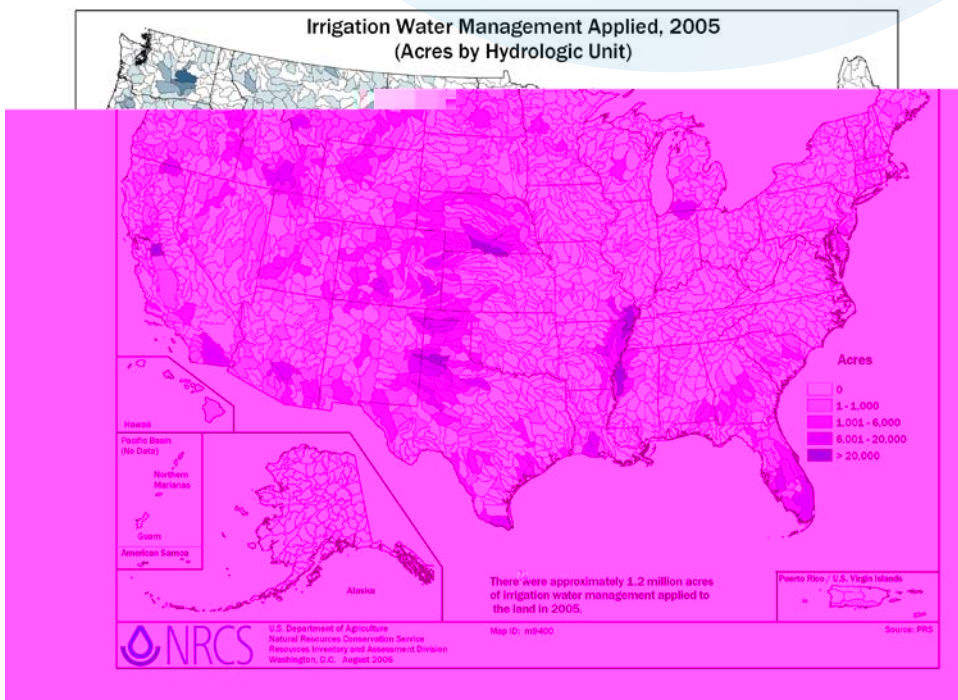
### Clean and Abundant **Water**

Well-cared-for watersheds are fundamental to ensuring clean and abundant water resources. Each year, droughts and floods adversely affect public health and safety, causing extensive and expensive damage to farms, ranches, and communities. Sound water and land management helps conserve and protect the quantity and quality of the Nation's finite surface and groundwater resources to ensure an abundant and reliable supply to the Nation.

In FY 2005, with NRCS technical and financial assistance, producers, landowners, and land managers:

- Applied conservation buffers on nearly 275,000 acres;
- Developed nearly 6,000 comprehensive nutrient management plans and applied over 4,500 plans;
- Applied nutrient management on 4.1 million acres;
- Applied pest management on 3.9 million acres; and
- Improved irrigation water management on more than 1.2 million acres, conserving over 900,000 acre-feet of water.

Figure 3: Irrigation Water Management Applied



In FY 2005, local sponsors, with NRCS technical and financial assistance:

- Completed 232 assessments on the condition of watershed dams to determine the potential threat to public health and safety;
- Rehabilitated or removed 11 unsafe dams;
- Installed 149 flood prevention or mitigation measures, including structures, easements, and other measures;
- Completed 162 watershed or area-wide resource plans, studies, or inventories for flood prevention or mitigation;

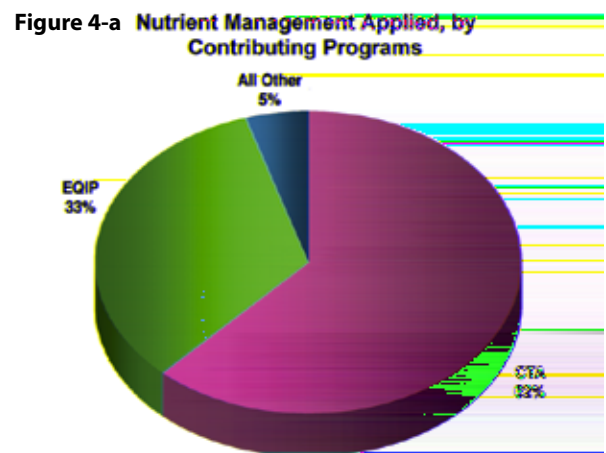
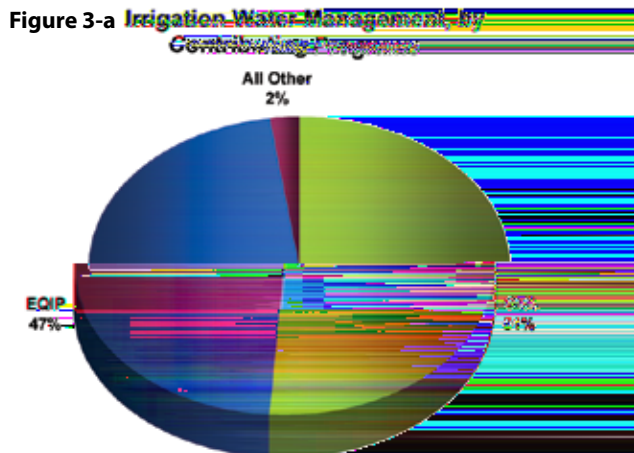


- Authorized watershed rehabilitation plans for 31 dams;
- Installed one multi-purpose water supply reservoir; and
- Developed 126 watershed or area-wide resource plans, studies or inventories for water conservation or water supply.

NRCS also worked with communities to develop 819 watershed or area-wide conservation plans on 71 million acres to improve or enhance water or air quality.

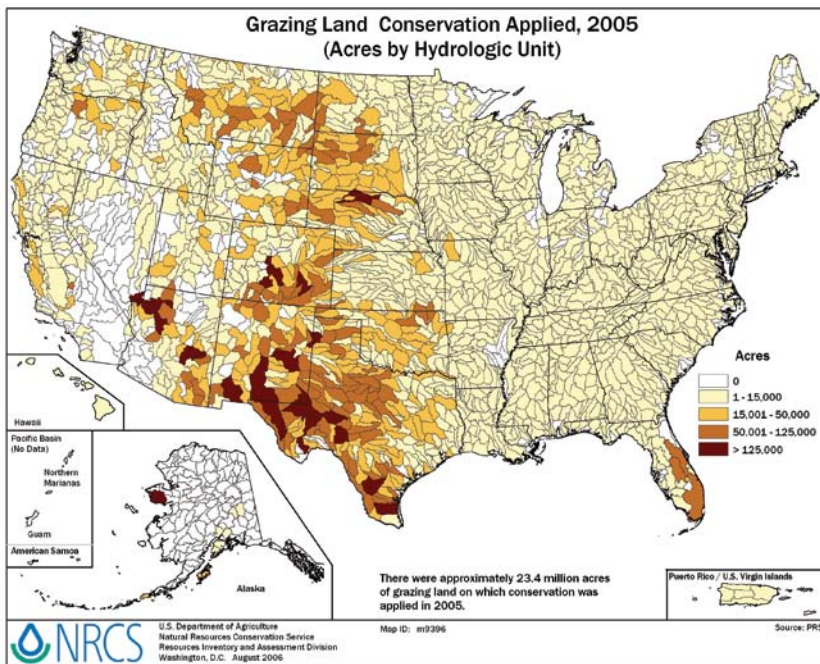
To assist in management of limited western water supplies, NRCS issued 15,356 water supply forecasts for Federal, State, and local water resource planning purposes. Western water users and managers accessed the National Water and Climate Center Website 23.5 million times for snow survey, water supply forecasts, and soil moisture data.

Figure 4: Nutrient Management Applied



## Foundation Goal:

# Healthy Plant and Animal Communities



Productive use of natural resources and protection of the environment are compatible and mutually supportive objectives. NRCS helps farmers, ranchers, and other landowners and managers, plus State and local planning entities, plan and apply conservation measures to develop and protect their natural resources and retain a healthy environment, as well as economic and aesthetic benefits essential to people's quality of life.

Figure 5: Grazing Land Conservation Applied

Figure 5-a



Full implementation of a conservation plan, developed to protect the soil resource base, provides secondary benefits, such as enhanced upland and wetland wildlife habitat. Increasingly, conservation plans are developed and implemented where wildlife habitat restoration or enhancement is the landowner/manager's primary or secondary objective.

In FY 2005, with NRCS technical and financial assistance, producers, landowners, and land managers:

- Developed conservation plans on 28.1 million acres and applied conservation systems on 23.4 million acres of grazing land to protect the resource base;
- Created, restored, or enhanced nearly 300,000 acres of wetlands;

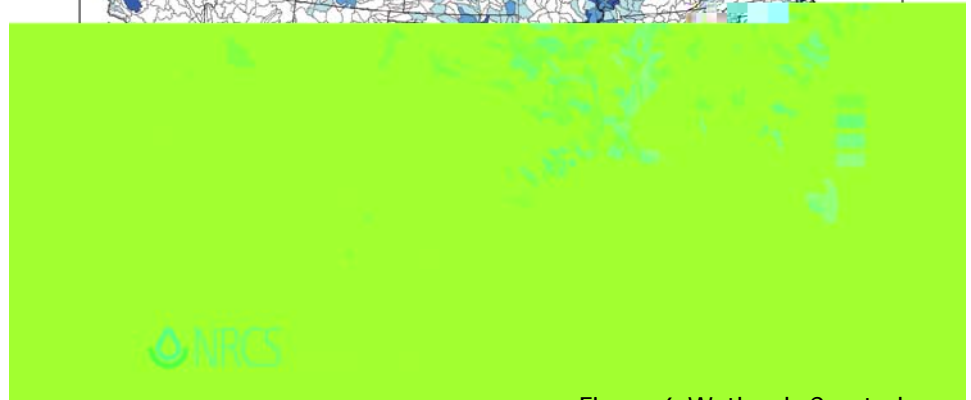
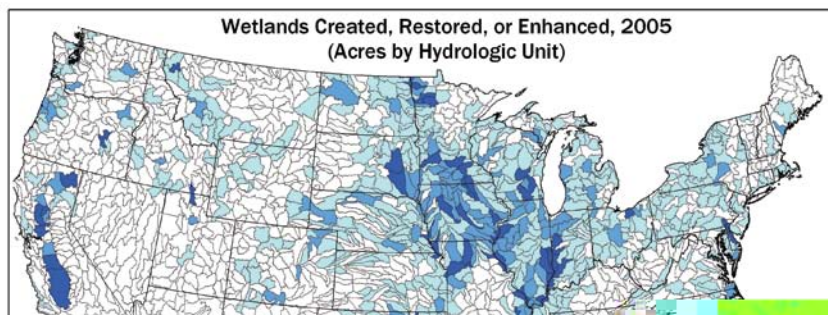
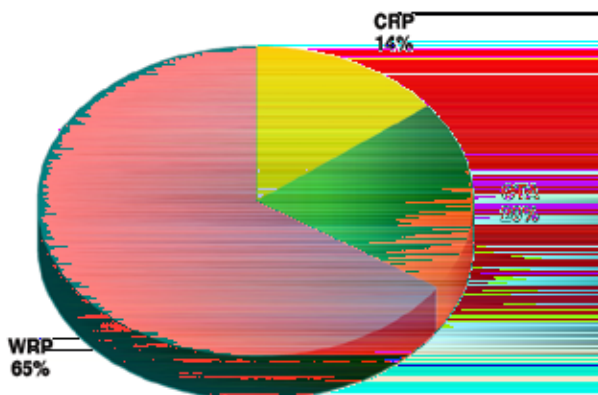


Figure 6: Wetlands Created, Restored, or Enhanced

Figure 6-a Wetlands Created, Restored or Enhanced by Contributing Programs



- Protected over 131,000 acres of wetlands with 30-year or permanent easements;
- Applied upland and wetland wildlife habitat management to 10.2 million acres of agricultural lands;
- Managed 2 million acres of agricultural lands for the protection and enhancement of habitat for species with declining populations;
- Installed 107,205 acres of riparian forest buffer; and
- Reestablished or improved 292,755 acres of forest land.

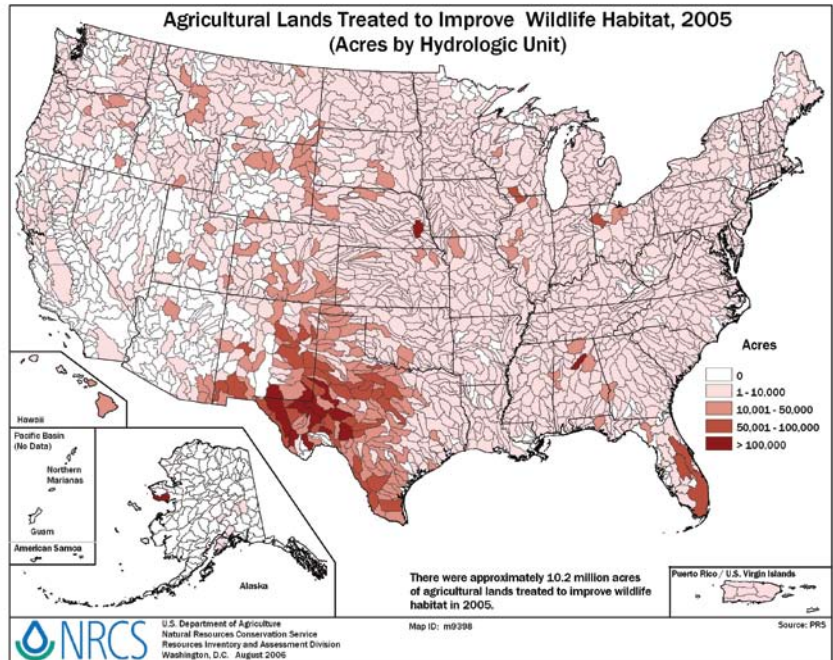
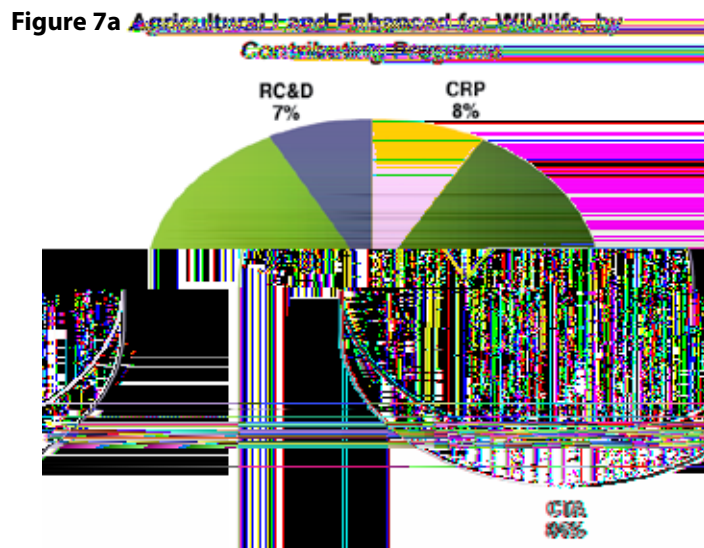


Figure 7: Agricultural Land Treated to Improve Wildlife Habitat.





## Venture Goal:

### Clean Air

Although agriculture has a relatively small role in air quality nationally, at the local level the impacts from wind erosion, prescribed burns, animal confinement and chemical drift can be significant. In addition, agriculture is uniquely positioned to improve air quality by mitigating the emissions from other sources.

In FY 2005, with NRCS technical and financial assistance, producers, landowners, and land managers:

- Applied carbon-building, residue management practices on 5,948,630 acres of cropland;
- Established or renovated 11,944,531 feet of shelterbelts and windbreaks;
- Planted cover crops on 478,690 acres of cropland; and
- Established 847,283 acres of conservation cover.

## Venture Goals

Venture Goals describe areas where NRCS anticipates the need for greatly expanded activity in the future.

## Venture Goal:

### An Adequate **Energy Supply**

The use of energy and energy-based products, from tractor use to commercial nitrogen fertilizers, significantly impacts the cost of agricultural production. Managing energy use will lower production costs as well as help reduce the Nation's dependence on foreign sources of fossil fuel. In addition, through the production of energy from renewable sources and biofuels, agriculture can contribute significantly to the Nation's energy supply.

In FY 2005, with NRCS technical and financial assistance, producers, landowners, and land managers:

- Reduced tillage and fuel use on nearly 6 million acres of cropland; and
- Developed nearly 6,000 and applied over 4,500 comprehensive nutrient management plans.



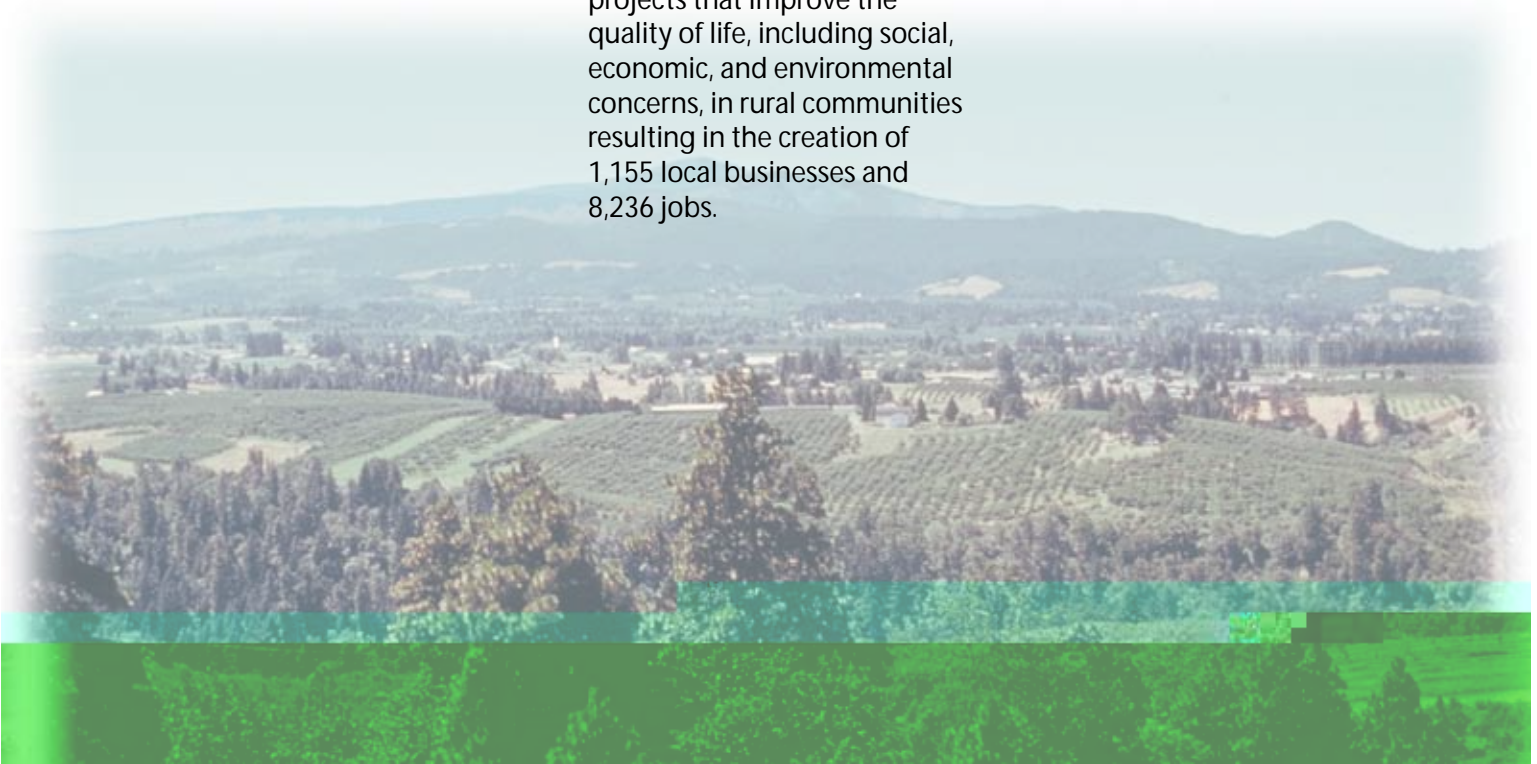
## Venture Goal:

### Working **Farm** and **Ranch** Lands

Viable, sustainable farms and ranches are able to maintain connected landscapes where agricultural and forest uses, water management, wildlife habitat and open space coexist and thrive.

In FY 2005, local communities with NRCS technical and financial assistance:

- Protected nearly 400,000 acres of farm and ranch land from conversion to non-agricultural uses, including over 200,000 acres of prime, unique, or important farmland; and
- Completed over 4,600 Resource Conservation and Development projects that improve the quality of life, including social, economic, and environmental concerns, in rural communities resulting in the creation of 1,155 local businesses and 8,236 jobs.



## NRCS Programs

In FY 2005, NRCS activities were funded through 19 programs, each with its own authorizing legislation and annual funding. Competitive grants, important stand-alone components within several program areas, focus a portion of program funds on special initiatives. Agency programs include:

### Conservation Operations

- Conservation Technical Assistance (CTA)
- Cooperative Conservation Partnership Initiative Grants (CTA-CCPI)
- Grazing Lands Conservation Initiative Grants (CTA-GLCI)
- Soil Survey
- Snow Survey and Water Supply Forecasting
- Plant Materials

### Water Resources

- Emergency Watershed Protection (EWP)
- Flood Prevention Operations
- Small Watershed Operations
- Watershed Planning
- Watershed Rehabilitation

### Farm Bill

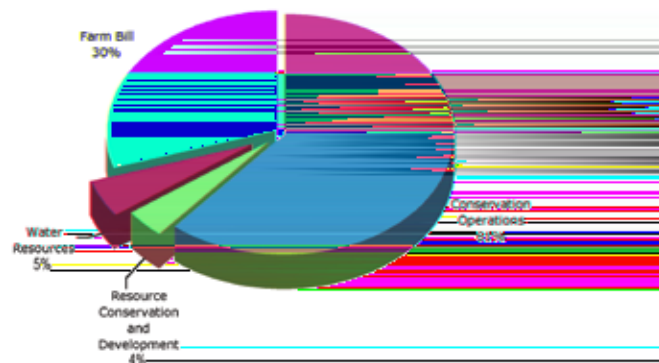
- Conservation Security Program (CSP)
- Environmental Quality Incentives Program (EQIP)
  - Conservation Innovation Grants (EQIP-CIG)
  - Klamath Basin (EQIP-Klamath)
  - Ground and Surface Water Conservation (EQIP-GSWC)
- Farm and Ranch Lands Protection Program (FRPP)
- Grassland Reserve Program (GRP)
- Wildlife Habitat Incentives Program (WHIP)
- Wetlands Reserve Program (WRP)
  - Wetlands Reserve Enhancement Program (WRP-WREP)
- Agricultural Management Assistance Program (AMA)

### Resource Conservation and Development (RC&D)



- **Conservation Operations** - Conservation Operations provides the infrastructure through which NRCS assists conservation districts, develops technical standards and technical guides, conducts resources inventories, and provides the conservation technical assistance to individuals and communities to plan and manage their natural resources.
- **Water Resources** - The water resource programs focus on restoring the health of watersheds through a comprehensive planning approach. These programs assist communities in protecting watersheds from damage caused by erosion, flood water, and sediment, and in conserving and developing water and land resources.
- **Farm Bill Programs** - These mandatory programs provide technical, financial, and educational assistance to help participants plan and apply conservation to address single or multiple natural resource concerns identified at the local level. Grant programs provide financial support to foster conservation innovation and watershed-scale approaches.
- **The Resource Conservation and Development Program** provides technical assistance to Resource Conservation and Development Councils to plan, develop, and carry out projects that address land conservation, water management, community development, and land management.

**Figure 8** Distribution of NRCS Staff Time by Major Program Category, FY2005



Distribution of NRCS FY 2005 staff years across major program areas. Calculated from 2007 President's Budget Summary.

## NRCS Business Lines

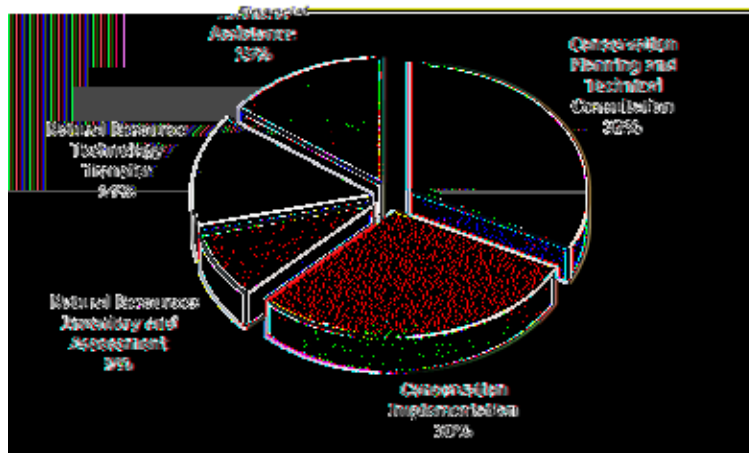
NRCS provides technical and financial assistance to landowners and managers through five business lines. Business lines are groups of similar products and services that Agency employees deliver to external customers. The five business lines are:

Business Line	Description
Conservation Planning and Technical Consultation	NRCS provides data, information, or technical expertise that helps people collect and analyze information to identify natural resource problems and opportunities, clarify their objectives, and formulate and evaluate alternatives.
Conservation Implementation	NRCS helps customers install conservation practices and systems on their land that meet established technical standards and specifications, and result in improved treatment of the resources.
Natural Resources Inventory and Assessment	NRCS assesses, acquires, develops, interprets, analyzes, and delivers natural resource data and information to enable knowledge-based natural resource planning and decision making at all landscape scales.
Natural Resource Technology Transfer	NRCS develops, documents, and distributes a wide array of technology pertaining to resource assessment, conservation planning, and conservation system installation and evaluation, including computer applications, standards and guidance documents, criteria, and plant materials.
Financial Assistance	NRCS provides financial assistance to encourage the adoption of land treatment practices that have been proven to provide significant public benefits. Financial assistance is awarded to participants who voluntarily enter into contracts, easements, and agreements to conserve natural resources.

In FY 2005, NRCS employees spent the majority of their time in **Conservation Planning and Technical Consultation** (32 percent) and **Conservation Implementation** (30 percent). NRCS employees also spent time on **Financial Assistance** (15 percent), **Natural Resource Technology Transfer** (14 percent), and **Natural Resources Inventory and Assessment** (9 percent) activities. See Figure 9.



Figure 9 NRCS Staff Time by Business Line, FY 2005



Distribution of NRCS FY 2005 staff time by Business Line. Data reflect the percent of NRCS FY 2005 staff years devoted to each of the Agency business lines. The primary services provided by staff in NRCS field offices are assistance in developing conservation plans, and applying and maintaining the conservation practices called for in those plans.

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